

2 COMBINED MONITORING REPORT

In accordance with Title V Permit Standard Condition 1.F, BAAQMD Rule 8-34-411 and §60.757(f) in the NSPS, this report is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report that is required to be submitted by Newby Island. The Combined Report contains monitoring data for the operation of the landfill gas (LFG) collection and control system (GCCS). The operational records have been reviewed and summarized. The timeframe included in this report is August 1, 2017 through January 31, 2018. The following table lists the rules and regulations that are required to be included in this Combined Report.

TABLE 2-1 - COMBINED REPORT REQUIREMENTS

Rule	Requirement	Location in Report
8-34-501.1 §60.757(f)(4)	All collection system downtime, including individual well shutdown times and the reason for the shutdown.	Section 2.1, Appendices C & D
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown.	Section 2.2, Appendix D & E
8-34-501.3, 8-34-507, §60.757(f)(1)	Continuous temperature for all operating flares and any enclosed combustor subject to Section 8-34-507.	Section 2.3, Appendix F
8-34-501.4, 8-34-505, 8-34-510	Monitoring and Testing performed to satisfy any of the requirements of this rule.	Section 2.4 & 2.10 Appendices F, G & J
8-34-501.5	Monthly LFG flow rates and well concentration readings for facilities subject to 8-34-404.	Section 2.5, 2.11 Appendix L
8-34-501.6, 8-34-503, 8-34-506 §60.757(f)(5)	For operations subject to Section 8-34-503 and 8-34-506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in parts per million by volume (ppmv), date of discovery, the action taken to repair the leak, date of the repair, date of any required re-monitoring, and the re-monitored concentration in ppmv.	Section 2.6 & 2.7, Appendices G & H
8-34-501.7	Annual waste acceptance rate and current amount of waste in-place.	Section 2.8
8-34-501.8	Records of the nature, location, amount, and date of deposition of non-degradable wastes, for any landfill areas excluded from the collection system requirement as documented in the GCCS Design Plan.	Section 2.9
8-34-501.9, 8-34-505, §60.757(f)(1)	For operations subject to Section 8-34-505, records of all monitoring dates and any excesses of the limits stated in Section 8-34-305 that are discovered by the operator, including well identification number, the measured excess, the action taken to repair the excess, and the date of repair.	Section 2.10 Appendices J & K
8-34-501.10, 8-34-508, §60.757(f)(1)	Continuous gas flow rate records for any site subject to Section 8-34-508.	Section 2.11, Appendices E and L
8-34-501.11, 8-34-509	For operations subject to Section 8-34-509, records or key emission control system operating parameters.	Section 2.2.2
8-34-501.12	The records required above shall be made available and retained for a period of five years.	Section 1.2

Rule	Requirement	Location in Report
§60.757(f)(2)	Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.	Section 2.2.1
§60.757(f)(6)	The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), (c)(4) of §60.755.	Section 2.14, Appendices A & C
§60.10 (d)(5)(i)	Startup, Shutdown, Malfunction Events	Section 4.0, Appendices C & D

2.1 Collection System Operation (BAAQMD 8-34-501.1 & §60.757(f)(4))

Appendix A contains a current map of Newby Island's existing GCCS. Section 2.1.1 includes the GCCS downtime for the reporting period. The information contained in Section 2.1.2 includes the number of individual well shutdowns. Refer to Appendix C for the well shutdown times and the reason for the shutdown.

2.1.1 Collection System Downtime

During the period covered in this report, the GCCS was not shut down for more than five days on any one occasion. The downtime for the reporting period of August 1, 2017 through January 31, 2018 was 44.47 hours. The total downtime for the 2017 calendar year to date was 201.47 hours out of an allowable 240 hours per year. The total downtime for 2018 as of January 31, 2018 is 1.30 hours. Per direction from Newby Island Operations personnel, the GCCS is not shutdown unless Cornerstone is notified by American Environmental Group (AEG) technicians. GCCS non-operational hours are tracked and recorded using the Yokogawa Continuous Control module.

Appendix D contains the A-2 and A-3 Flare Downtime Reports which list dates, times, and lengths of shutdowns for the reporting period and year-to-date. Appendix E contains the GCCS Downtime.

2.1.2 Well Start-Up & Disconnection Log

There were 18 wellfield SSM events that occurred during the reporting period. See Appendix C, Wellfield SSM Log, for details of decommissionings, start-ups, and well disconnection and reconnection events. Well Decommissioning and Start-up Notification Letters were submitted to the BAAQMD and are included in Appendix B.

2.2 Emission Control Device Downtime (BAAQMD 8-34-501.2 & §60.757(f)(3))

The emission control system consisted of three flares (A-1, A-2 and A-3), which began operation in 1997, 2007, and 2015, respectively. The A-1 Callidus Flare was decommissioned on March 4, 2015. On May 29, 2015, Republic sent a notification to the BAAQMD that the A-1 Callidus Flare had been permanently taken out of operation. The control system was not bypassed at any time during the reporting period. Raw LFG was not emitted during the reporting period. The SSM Logs for the A-2 and A-3 Flares are located in Appendix D.

2.2.1 LFG Bypass Operations (§60.757(f)(2))

Title 40 CFR §60.757(f)(2) is not applicable at Newby Island because a bypass line has not been installed. LFG cannot be diverted from the control equipment.

2.2.2 Key Emission Control Operating Parameters (BAAQMD 8-34-501.11 & 8-34-509)

BAAQMD Regulation 8-34-501.11 and 8-34-509 are not applicable to the A-2 and A-3 Flares because the A-2 and A-3 Flares are subject to continuous temperature monitoring as required in BAAQMD Regulation 8-34-507 and §60.757(f)(1).

2.3 Temperature Monitoring Results (BAAQMD 8-34-501.3, 8-34-507, & §60.757(f)(1))

The combustion zone temperatures of the flares are monitored with Thermo-Electric Thermocouples. The temperature is displayed with a Yokogawa digital recorder, which is downloaded and archived. There were no temperature deviations during the reporting period. Appendix F contains the Flare Temperature Deviation/Inoperative Monitor/Missing Data Report for August 1, 2017 through January 31, 2018.

2.4 Monthly Cover Integrity Monitoring (BAAQMD 8-34-510)

The cover integrity monitoring was performed on the following dates:

- August 29, 2017;
- September 28, 2017;
- October 27, 2017;
- November 22, 2017;
- December 29, 2017; and
- January 31, 2018.

The Monthly Cover Integrity Monitoring Logs are included in Appendix G.

2.5 Less than Continuous Operation (BAAQMD 8-34-501.5)

Newby Island does not operate under BAAQMD Regulation 8-34-404 (Less Than Continuous Operation) and, therefore, is not required to submit monthly LFG flow rates.

2.6 Surface Emissions Monitoring (BAAQMD 8-34-501.6, 8-34-506, §60.757(f)(5) & California Air Resources Board Assembly Bill 32 Methane Control Measure (CARB AB-32 LF MCM))

Quarterly Surface Emissions Monitoring (SEM) was conducted for First and Second Quarter 2017 on the following dates:

- Third Quarter 2017 – September 22, 25, 26, 27, October 2, 5, 16, and 24, 2017; and
- Fourth Quarter 2017 – November 19, 20, 21, 28, December 8 and 21, 2017.

During the Fourth Quarter 2017 SEM event, there were five instantaneous exceedances above 500 parts per million (ppm) and three individual grids with measured integrated exceedances of above 25 ppm that did not return to compliance within the required re-monitored time frames, pursuant to the regulations noted above. Therefore, it was noted that these locations would need to be remediated and any construction for remediation completed within 120 days by expansion of the GCCS. On February 8, 2018, Cornerstone submitted a Request for Limited Exemption (for construction activities) from Regulation 8, Rule 34 (Solid Waste Disposal Sites), Section 303 (Landfill Surface Requirements) regarding an expansion of the GCCS as required by the California Code of Regulation (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, Section 95469(a)(2)(B)(2). During this construction, seven new vertical LFG extraction wells will be installed and are to begin operation on or before March 21, 2018. A copy of the aforementioned submittal will be included in the February 1, 2018 through July 31, 2018 report, which is due to the BAAQMD and USEPA Region IX by August 31, 2018.

Refer to the Third and Fourth Quarter 2017 SEM Reports located in Appendix H for detailed results.

2.7 Component Leak Testing (BAAQMD 8-34-501.6 & 8-34-503)

Quarterly component leak testing, pursuant to BAAQMD Regulation 8-34-503, occurred during the reporting period on the following dates:

- Third Quarter 2017 – September 28 and 30, 2017; and
- Second Quarter 2017 – October 13, 2017.

Refer to the Third and Fourth Quarter 2017 LFG Component Leak Monitoring Forms, located in Appendix I, for detailed results.

2.8 Waste Acceptance Records (BAAQMD 8-34-501.7)

The Annual Waste Acceptance Rate was compiled for the timeframe of August 1, 2017 through January 31, 2018. The amount of degradable waste accepted during this period was approximately 314,430.18 tons. The degradable current Waste-In-Place (WIP) as of January 31, 2018 is approximately 31,257,881.18 tons.

2.9 Non-degradable Waste Acceptance Records (BAAQMD 8-34-501.8)

The GCCS Design Plan for Newby Island does not have an allowance for non-degradable waste areas that are excluded from the collection system. Therefore, BAAQMD Regulation 8-34-501.8 is not applicable.

2.10 Wellhead Monitoring Data (BAAQMD 8-34-501.4 & 8-34-505)

Wellhead monitoring was performed on a monthly basis pursuant to 8-34-505. The well readings for August 1, 2017 through January 31, 2018 are included in Appendix J. Each well was monitored in accordance with the following requirements:

- 8-34-305.1 – Each wellhead shall operate under a vacuum;
- 8-34-305.2 – The LFG temperature in each wellhead shall be less than 55 degrees Celsius (°C) (131 degrees Fahrenheit [°F]); and
- 8-34-305.4 – The oxygen concentration in each wellhead shall be less than five percent by volume.

Wellhead monitoring was performed on the following dates:

- August 2, 7, 8, 9, 16, 17, 18, 22, 23, 24, 28, and 29, 2017;
- September 7, 18, 20, 21, 26, and 27, 2017;
- October 1, 4, 5, 6, 10, 12, 18, 19, and 20, 2017;
- November 1, 2, 7, 9, 10, 13, 16, 18, 21, 22, 28, and 29, 2017;
- December 5, 6, 8, 12, 14, 15, 19, 26, 27, 28, and 29; and
- January 9, 10, 11, 12, 15, 16, 17, 18, 19, 22, 25, 26, and 29, 2018.

2.10.1 Wellhead Deviations (BAAQMD 8-34-501.9 & §60.757(f)(1))

There were 144 individual wells with readings that exceeded the limits set forth in BAAQMD Regulation 8-34-305 during the reporting period. Corrective action for these

wells was initiated within the required five day time period and re-monitoring was completed within 15 days of the deviation pursuant to BAAQMD Regulation 8-34-414. See Appendix K, Wellfield Deviation Log, for more detail.

2.10.2 Higher Operating Value (HOV) Wells

Oxygen HOV Wells

Pursuant to Title V Permit Condition Number 10423, Part 6(c)(i), the oxygen concentration limit does not apply to the wells listed below, provided that the oxygen concentration in the LFG at the main header does not exceed five percent oxygen by volume (dry basis) and the methane concentration is greater than 35 percent by volume (dry basis): 30RR, EW-09, EW-13, 72R, 101R, 103R, 13R, EW-20R, 224R, 237R, HC-201, HC-231, HC-232, HC-235, HC-237, HC-239, HC-240, and HC-241.

Temperature HOV Wells

Pursuant to Title V Permit Condition Number 10423, Part 6(d)(i), the following wells are approved to operate at a temperate HOV of 145°F: EW-39R, EW-40R, EW-14, EW-15, EW-37, 5, A, B, C, D, E, 14, 16, 19, 25, 106R, 218, 224R, 243, 31R, 51R, and 54R. Pursuant to Title V Permit Condition Number 10423, Part 6(d)(ii), the following well is approved to operate at a temperate HOV of 150°F: EW07R.

2.11 Gas Flow Monitoring Results (BAAQMD 8-34-501.10, 8-34-508, & §60.757(f)(1))

The flare LFG flow rate is measured with a Thermal Instruments flowmeter. The control panel displays the LFG flow and the digital Yokogawa data recorder records LFG flow every two minutes and is downloaded and saved to a compact flash card. The flare flow meter meets the requirements of BAAQMD Regulation 8-34-508 by recording data at least every 15 minutes. The flow meter is maintained and calibrated pursuant to manufacturer's recommendations. The flow data for the flare is available for review at Newby Island. Appendix L contains a summary of the monthly LFG flow rates for the flares. Appendix F contains the Flare Temperature Deviation/Inoperative Monitor/Missing Data Report for August 1, 2017 through January 31, 2018 Compliance with Title V Permit Condition Number 10423 Part 10.

Pursuant to Title V Permit Condition Number 10423, Part 10(a), quarterly hydrogen sulfide (H₂S) readings were taken using Draeger tubes. Third and Fourth Quarter 2017 H₂S readings and quarterly averages are included in Appendix N, H₂S Quarterly Monitoring.

2.12 Compliance with §60.757(f)(6)

"The date of installation and the location of each well or collection system expansion added pursuant to (a)(3), (b), (c)(4) of §60.755."

The GCCS was modified pursuant to Title V Permit Number A9013 during the reporting period.

There were 18 wellfield SSM events that occurred during the reporting period. Eleven wells were decommissioned during the reporting period pursuant to Application Number 27202.

On January 17, 2018, Application Number (A/N) 28706 was issued by the BAAQMD. Pursuant to Title V Permit Condition Number 10423, Part 6(b) and Change of Permit Conditions dated January 17, 2018 with AN 28706 allows for the unlimited replacement of vertical wells, installation of 100 new vertical wells, installation of 40 new horizontal collectors, the decommissioning of up to 96 vertical wells, and the decommissioning of up to 30 horizontal collectors.

As of January 31, 2017, Newby Island consists of 244 vertical wells, 23 horizontal collectors and five leachate cleanout risers.

2.13 Compliance with Title V Permit Condition Number 14908 for S-4 Non-Retail Gasoline Dispensing Facility G#9641

Appendix O contains monthly throughput records for this reporting period. From February 1, 2017 through January 31, 2018, the 12 month gasoline throughput of 8,851.4 gallons (gal) is within the limit of 940,000 gal per any consecutive 12-month period pursuant to the BAAQMD Toxic Section Policy.

2.14 S-8 Horizontal Grinder/Operations and S-9 Trommel Screen/Operations

The S-8 Horizontal Grinder/Operations and S-9 Trommel Screen/Operations replaced the previously existing Sources S-5 and S-6 and are registered under the California Air Resources Board (CARB) Portable Equipment Registration Program (PERP). The S-8 Horizontal Grinder/Operation is permitted under CARB PERP Registration Number 149997. The S-9 Trommel Screen/Operation is permitted under CARB PERP Registration Number 125994. On February 21, 2017, the BAAQMD incorporated the Horizontal Grinder Operations and Trommel Screen Operations into Newby Island's Permit-to-Operate (PTO) as Source Numbers 1008 and 1009, respectively. The inclusion of these sources into the Facility Title V Permit is still pending as of the submittal of this report.

4 START-UP, SHUTDOWN, MALFUNCTION REPORT

4.1 SSM Log for the GCCS at Newby Island


The NESHAP contained in 40 CFR Part 63, AAAA for MSW landfills to control hazardous air pollutants include the regulatory requirements for submittal of a semi-annual report (under 40 CFR §63.10(d)(5) of the general provisions) if an SSM event occurred during the reporting period. The reports required by §63.1980(a) of the NESHAP and §60.757(f) of the NSPS summarize the GCCS exceedances. These two semi-annual reports contain similar information and have been combined as allowed by §63.10(d)(5)(i) of the General Provisions.

NESHAP 40 CFR part 63, AAAA became effective on January 16, 2004. Those SSM events that occurred during the NSPS semi-annual reporting period are reported in this section (August 1, 2017 through January 31, 2018). The following information is included as required:

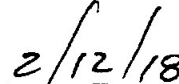
- During the reporting period, 83 A-2 Flare SSM events occurred. The A-2 Flare was shut down and restarted during the reporting period due to the reasons noted in Appendix D, Flare SSM Log;
- During the reporting period, 67 A-3 Flare SSM events occurred. The A-3 Flare was shut down and restarted during the reporting period due to the reasons noted in Appendix D, Flare SSM Log;
- During the reporting period, 18 Wellfield SSM events occurred. Details are included in Appendix C, Well SSM Log;
- There were 168 events in total. In all 168 events, automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan. There were no deviations from the SSM plan;
- Exceedances were not identified during the reporting period to any applicable emission limitation in the landfills NESHAP (§63.10(d)(5)(i)); and
- Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).

I certify the following:

Based on information and belief formed after reasonable inquiry, information on the startup, shutdown, malfunction forms, all accompanying reports, and other required certifications are true, accurate, and complete.



Signature of Responsible Official



Date

Evan Boyd

Name of Responsible Official